

REMARKS

Claims 18, 20-27, 36 and 37 are pending in the instant application. Of those pending claims, Claim 26 has been withdrawn. Reconsideration of the pending claims in light of the amendments presented above and the remarks presented below is respectfully requested.

35 USC § 112

Claim 24 stands rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In particular, the Examiner asserts that there is insufficient antecedent basis for the use of the term “said ETM” in the claim. In light of the amendment presented above, withdrawal of this rejection is respectfully requested.

35 USC § 102

Claims 18, 27, and 36 stand rejected under 35 USC § 102(e) as being anticipated by Heller et al., US Patent No. 6,652,808, filed on December 6, 1998 (“Heller”). In particular, the Examiner asserts that Heller teaches nanobeads or nanoparticles comprising a fluorescent moiety (which the Examiner characterizes as a ETM) and at least a first specific DNA polymer sequence. The Examiner also asserts that Heller teaches microarrays of electrodes having DNA polymer sequences complementary to the sequence attached the beads or particles.

For an anticipation rejection under 35 U.S.C. §102(e) to be proper, a single reference must expressly or inherently disclose each and every element of a claim. *In re Paulsen*, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994); MPEP § 2131 (citing *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). Each of the pending claims, as currently amended, include a detector capable of detecting electron transfer from the recited ETMs. Heller does not disclose such a detector due to the fact that Heller uses fluorescence measurements to detect the presence of the nanobeads, instead of detecting electron transfer. As Heller does not disclose each and every element of the rejected claims, Heller cannot anticipate the claims and withdrawal of the rejections under 35 U.S.C. § 102(e) is respectfully requested.

35 USC § 103

Claims 20 and 21 stand rejected under 35 USC § 103(a) as being unpatentable over Heller further in view of Sigal et al., US Patent No. 6,319,670, filed on December 23, 1997 (“Sigal”).

To establish a *prima facie* case of obviousness the prior art reference (or references when combined) must teach or suggest all the claim limitations. In addition, the teaching or suggestion to make the claimed combination must be found in the prior art, and not based on applicant’s disclosure. *See, In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) M.P.E.P. §2143.

As discussed above, the Examiner Heller does not teach the use of a detector capable of detecting electron transfer from the recited ETMs. Sigal does not remedy this deficiency as Sigal is limited to light (electrochemiluminescence) detection, instead of detection of electron transfer. As the cited references alone, or in combination, do not teach or suggest all of the claim limitations, the Examiner has not established a *prima facie* case of obviousness, and therefore withdrawal of the instant rejection is respectfully requested.

Similarly, the remaining rejections (Claims 22, 24 and 25) rely on Heller’s disclosure that, as discussed above, does not teach a detector for detection of electron transfer. As the Examiner has not shown that the cited references teach or suggest, alone or in combination, each and every claim limitation, the Examiner has also failed to establish a *prima facie* case of obviousness in each of those cases. Accordingly, withdrawal of each of those rejections is also respectfully requested.

CONCLUSION

Applicants submit that the application is in form for allowance and early notification of such is requested. If the Examiner believes that any unresolved issues may be disposed of by telephone, he is respectfully requested to call the undersigned at (415) 781-1989. This paper is filed under 37 C.F.R. section 1.34(a).

Respectfully submitted,
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